

P.O.W.
P.O.U.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
APPLICATION FOR CHANGE

REPORT OF EXAMINATION

TO APPROPRIATE PUBLIC WATERS OF THE STATE OF WASHINGTON

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Surface Water

(Issued in accordance with the provisions of Chapter 117, Laws of Washington for 1917, and amendments thereto, and the rules and regulations of the Department of Ecology.)

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Ground Water

(Issued in accordance with the provisions of Chapter 263, Laws of Washington for 1945, and amendments thereto, and the rules and regulations of the Department of Ecology.)

PRIORITY DATE	APPLICATION NUMBER	PERMIT NUMBER	CERTIFICATE NUMBER
November 26, 1990	G2-27927	G2-27927	

NAME			
Prospect View, Inc.			
ADDRESS (STREET)	(CITY)	(STATE)	(ZIP CODE)
4890 South Discovery Road	Port Townsend	Washington	98368

PUBLIC WATERS TO BE APPROPRIATED

SOURCE
Well (ABC 314)
TRIBUTARY OF (IF SURFACE WATERS)

MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE	MAXIMUM ACRE-FEET PER YEAR
	40	9.5

QUANTITY, TYPE OF USE, PERIOD OF USE		
9.5 acre-feet per year	Multiple domestic supply	Year-round, as needed

LOCATION OF DIVERSION/WITHDRAWAL

APPROXIMATE LOCATION OF DIVERSION--WITHDRAWAL
850 feet south and 950 feet west of the northeast corner of Section 34

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP N.	RANGE, (E. OR W.) W.M.	W.R.I.A.	COUNTY
NE¼NE¼	35	30	1W	17	Jefferson

RECORDED PLATTED PROPERTY

LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)
41/42	117	Irondale Division 5

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED

Lots 6 through 46, Block 158, Irondale Division #6
Lots 1 through 24, Block 160, Irondale Division #6
Lots 1 through 21, Block 162, Irondale Division #6

DESCRIPTION OF PROPOSED WORKS

A well: 6-inch casing, 217 feet deep

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE:

Started

COMPLETE PROJECT BY THIS DATE:

May 1, 1997

WATER PUT TO FULL USE BY THIS DATE:

May 1, 2002

REPORT

BACKGROUND:

On August 19, 1994, W.E. Seton, on behalf of Prospect View Estates, filed an *Application for Change* requesting a change in the point of withdrawal and place of use of water right permit number G2-27927.

A public notice of the proposed changes was published in *The Port Townsend Jefferson County Leader*. In response to the public notice, Ecology received protests from John Kuller of the Kala Point Home Owners Association and Bill Lindeman of the Kala Point Utility Company. The protestants are concerned that the relocation of the subject well will have an adverse affect on the Kala Point community's wells.

Based on the provisions of Revised Code of Washington (RCW) 90.03 and 90.44 and the following report of examination, I recommend issuance of an amended permit.

INVESTIGATION:

The intent of this *Application for Change* is to change the point of withdrawal authorized by permit number G2-27927 and to modify the legal description to reflect an expanded project area.

The project site is located within the Tri-Area region of eastern Jefferson County, Washington. The City of Port Townsend is situated approximately 6 miles to the north. Residential development in this area is generally sparse but anticipated to increase as homes are constructed within the extensively platted region.

Water Right Permit number G2-27927 has a November 26, 1990, priority date. The permit authorizes the withdrawal of 40 gpm, 9.5 acre-feet per year for multiple domestic supply. The well originally authorized by the permit is located less than 500 feet from the shoreline and has chloride levels that exceed the 250 mg/L maximum standards for drinking water. The applicant wishes to transfer the permit to a replacement well that is located 2,300 feet west and 300 feet north of the original site.

The original well was drilled in 1981 to a depth of 157 feet below ground surface, in a fairly shallow, unconfined aquifer. Given that the site elevation is 132 feet, the well is completed approximately 25 feet below mean sea-level. I recommend that this well be properly abandoned in accordance with state regulations.

New Well Construction

Well depth:	217 feet
Static:	167'1" below ground level
Casing size:	6-inch
Screens:	From 207 to 217 feet
Pump size:	5-horsepower
Driller:	Burt Well Drilling
Drill date:	July 1994
Unique ID:	ABC 314

The replacement well was pump-tested at a constant withdrawal rate of 60 gpm. The pre-test static water level was 167.1 feet below ground surface. Drawdown stabilized after 20 hours of pumping at 180.1 feet below ground surface, a decline of 13 feet. Recovery of the pre-test static water level was complete within 3 minutes of the test's termination.

Sea Water Intrusion

Laboratory analysis of the samples taken from the well indicated a chloride concentration of 9.8 mg/L and a conductivity of 452 μ mhos/cm.

The well logs indicate that this well is completed in the water-bearing sand and gravel of a sea-level aquifer. The surface elevation at the site is approximately 170 feet above mean sea-level, placing the well's completion at about 45 feet below sea-level.

The pumping of this replacement well increases the potential for an inland migration of the sea-water/fresh-water interface, which could affect wells that are seaward of the production well. However, given the low withdrawal rate and relatively low annual allocation, I do not anticipate the overall impact being significant. However, in order to better manage the areas water resources, Prospect View will be required to conduct regular chloride monitoring of the well to detect signs of sea-water encroachment.

Consideration of Kala Point Concerns

The Kala Point development is located on nearly 400 acres in Sections 26 and 27, Township 30 North, Range 1 West, W.M., to the northeast of the Prospect View site. The community uses ground water withdrawn from wells owned and operated by the Kala Point Utility Company. Kala Point has four wells; two are located about a mile to the northwest of the Prospect Estates well, the other two, Well #1 and #2, are situated approximately a half mile to the northeast. Well #1 and #2 are, according to Kala Point Utility's Bill Lindeman, used on a "standby basis" due to high chloride levels.

Well #1 and #2 are 125 and 181 feet in depth, respectively. Surface elevation at the site appears to be between 120 and 160 feet above sea-level. Well #3 and #4 are considerably deeper, drilled to depths of 468 and 500 feet. Total water rights allocated to Kala Point are limited to 289 acre-feet per year, under the following four water right certificates:

<u>Water Right Number</u>	<u>Acre-feet/year</u>	<u>Source</u>
G2-23892	89	Well #1
G2-24203	96	Well #2
G2-24848	289*	Well #3
G2-24998	160*	Well #4

*Partially supplemental to existing rights

The Kala Point Utility Company and Owners Association were concerned about the potential for impacts resulting from the change in point of withdrawal and subsequently retained the consulting firm Robinson & Noble to evaluate the risk of well impairment to the Kala Point wells, as a result of allowing the new Prospect View well to go on-line.

A pump-test was conducted on Kala Point Well #3, during which a series of monitoring wells were observed to determine if continuity between the production wells could be demonstrated. The results of the test indicate that the pumping of the Prospect View well will cause no significant drawdown interference on the Kala Point wells, at least during the short-term.

Kala Point has subsequently agreed to withdraw their objections to the transfer of the water right, provided that the follow conditions are imposed on the amended permit:

- the withdrawal is limited to a maximum of 40 gpm, from a single production well; and
- regular static water level and production data be collected and made available to Kala Point for review.

Given the low withdrawal rate authorized by the existing permit and relatively low annual allocation, I do not anticipate the overall effect of bringing the subject well on-line to be significant or adverse to neighboring ground water users.

Jefferson County Public Utility District Coordination

The Jefferson County Public Utility District's (PUD) Glen Cove South Water System wells are located approximately a mile to the east on Port of Port Townsend property at the Jefferson County Airport. The wells are 74 and 120 feet in depth. The water rights allocated to PUD's Wells #1 and #2A amount to 96 acre-feet per year, at a combined withdrawal rate of 96 gpm.

It is the intent of the applicant to dedicate the subject well to the PUD as a third point of withdrawal. The homes associated with the project will be supplied by the PUD as designated satellite water purveyor. Accordingly, prior to final certification of this permit, this right will be formally assigned to the Jefferson County PUD.

CONCLUSION:

In accordance with Chapters 90.03 and 90.44 RCW, I find that changing the place of use and point of withdrawal, as recommended, does not impair existing rights and is not detrimental to public welfare.

RECOMMENDATIONS:

I recommend the approval of this *Application for Change* and the issuance of an amended permit to change the place of use and point of withdrawal on ground water right number G2-27927. This right is subject to the following provisions:

Provisions

"The original well authorized by this permit shall be abandoned in accordance with State Regulations. A record of the procedures shall be submitted prior to issuance of a final water right certificate."

"Prior to final certification of this permit, this water right will be formally assigned to the Jefferson County PUD."

An approved metering device shall be installed and maintained in accordance with RCW 90.03.360, WAC 508-64-020 through -040 (installation, operation, and maintenance requirements are attached). Meter readings shall be recorded at least monthly.

Chloride concentration analysis shall be performed prior to system use, then annually when the system is in use, by a accredited laboratory. The resulting data shall be submitted to the Department of Ecology, Southwest Regional Office, upon request.

If the chloride concentration exceeds 50 mg/L, the withdrawal rate shall be reduced or the pump setting raised to reduce the chloride level to below 50 mg/L.

"The applicant is advised that notice of Proof of Appropriation of water (under which the final certificate of water right is issued) should not be filed until the permanent distribution system has been constructed and that quantity of water allocated by the permit has been put to full beneficial use."

Monitoring Provisions

In order to maintain a sustainable supply of water, pumping must be managed so that static water levels do not progressively decline from year to year. Water levels shall be measured and recorded monthly, using a consistent methodology. The length of the pumping period or recovery period prior to each measurement shall be constant, and shall be included in the record. Data shall be submitted annually, in the month of February, to the Department of Ecology.

Report Continued

Under RCW 90.44.250 and 90.54.030, the Department of Ecology is directed to become informed about all aspects of the water resources of the State. The Department is authorized to make such investigations as may be necessary to determine the location, extent, depth, volume, and flow of all ground waters within the State. Accordingly, the applicant shall monitor and provide an annual summary of the previous year's monthly water level data and monthly totals of water pumped for this well. The summary shall be submitted in tabular format to Ecology's Southwest Regional Office annually, during the month of February, or more frequently if requested by the Department.

The subject well has been tagged with a well identification number. It is printed on that metal tag which is attached to the well. This unique well number should remain attached to the well, please reference this code when submitting data.

REPORTED BY:

Jam Dulle

Date: April 14, 1995

The statutory permit fee for this application is \$20.00.

FINDINGS OF FACT AND DECISION

Upon reviewing the above report, I find all facts relevant and material to the subject application have been thoroughly investigated. Furthermore, I find water is available for appropriation and the appropriation as recommended, is a beneficial use and will not be detrimental to existing rights or the public welfare.

Therefore, **I ORDER** a permit be issued under Ground water Application Number G2-27927, subject to existing rights and indicated provisions, to allow appropriation of public ground water for the amount and uses specified in the foregoing report.

Signed at Olympia, Washington, this 14th day of April, 1995.

Gale Blomstrom

Gale Blomstrom
Water Resources Supervisor
Southwest Regional Office